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312066 0281 5592 3

Learning Innovations
91 Montvale Avenue
Stoneham, MA 02180
Phone 781.481-1100
FAX 781.481-1120

LearningInnovations at WestEd

# HOW MASSACHUSETTS SCHOOLS ARE USING MCAS TO CHANGE CURRICULUM, INSTRUCTION, ASSESSMENT, AND RESOURCE ALLOCATION

## A Study Conducted for the Massachusetts Education Reform Review Commission (MERRC)

**Prepared by**
**Ann Abeille, Director of Research and Evaluation and**
**Nancy Hurley, Associate in Research and Evaluation**

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# HOW MASSACHUSETTS SCHOOLS ARE USING MCAS TO CHANGE CURRICULUM, INSTRUCTION, ASSESSMENT, AND RESOURCE ALLOCATION

## BACKGROUND / PURPOSE

The Massachusetts Comprehensive Assessment System (MCAS), as a key component of Massachusetts Education Reform, was conceptualized and designed to serve as a tool to support efforts of schools and districts to improve student learning by providing a consistent measure of achievement linked to the statewide curriculum frameworks. This system assumes use of the results by educators to make appropriate changes in curriculum, instruction, assessment, and allocation of resources. As in other states, different aspects of this strategy are under discussion on many levels and receiving praise and criticism from a variety of stakeholders. This particular research study has been designed and conducted with a relatively narrow focus on how educators in the state are actually making use of the MCAS results. It does not address whether or not the changes being made are desirable or seek to understand the impact that reported changes have on student achievement.

The primary purposes of this research study were to:

- Determine to what extent and in what form teachers are receiving MCAS results;
- Identify common practices among Massachusetts schools and districts in utilizing MCAS results to change curriculum, instruction, assessment, and resource allocation;
- Identify and disseminate information about positive or initially successful practices in such utilization, as well as any "negative" implications of changes (should they exist), to schools throughout the Commonwealth; and
- Promote discussion and sharing of effective strategies for using MCAS results among participating superintendents and other district administrators, school principals, and teachers.

## RESEARCH QUESTIONS

The following is a sampling of research questions addressed in this study from the variety of data collection methods used.

- What information about MCAS performance are schools and districts disseminating to their classroom teachers? What methods are they using to disseminate the

information and at what level of aggregation and detail? To what extent and in what ways are teachers and principals engaged in analysis and discussion of MCAS student performance data related to district, school, and individual teacher accountability?

- Are schools and districts using their MCAS results to analyze performance and implement changes in curriculum, instruction, assessment, and/or resource allocation? If so, how are they going about these changes and who is involved? To what extent, if any, are current courses and programs being eliminated or modified in negative ways as a result of MCAS related decisions? How are teachers being drawn into this process? Which strategies are gaining teacher buy-in and perceived empowerment through the constructive use of the MCAS as opposed to forced use for change?

- What forms of assistance and/or professional development are being made available and are useful in helping teachers understand the information provided and how to use it? What incentives are in place for teachers to use this information to change instructional practice in their classrooms? To what extent and in what ways do administrators and teachers engage in productive discussions of MCAS results focused on student identified needs? What professional development practices and models have helped to foster productive MCAS data analysis, discussion and modification of instructional practice? To what extent is analysis of MCAS data serving as a stimulus for groups of educators in individual schools to work together toward common purposes based on identified student needs?

- How are teachers actually using this information to change instructional and assessment practice in their classrooms? What, if any, results have been observed as a result of these changes in practice? Are teachers able to articulate the connections between the changes they are making and the MCAS results? Do teachers believe the changes they are making in practice are designed to enhance student learning, as well as student test taking ability?

- How are superintendents and other district administrators exerting leadership in the use of MCAS for school improvement through their work with school principals, School Committees, teachers, parents and other community members? What communication and professional development strategies are they using and finding to be most effective in encouraging learning and positive, responsible use of MCAS results within individual schools and the district as a whole? Which districts are making the most effective use of their MCAS data and how are they using this information?

- What strategies are school principals using to engage, motivate, and support teachers to use the MCAS to make changes to curriculum, instruction, and assessment? What changes in budget allocations are being made to support this work? How are these budget allocation decisions being made? How are school principals preparing themselves to better understand their schools' MCAS information and to articulate resulting plans to address identified needs?

# METHODS

The following data collection activities were used in preparation for this report:

**Stage 1 Data Collection** – During this initial stage (late January and early February, 2000), Leaming Innovations conducted a series of focus group discussions for superintendents, principals, and teachers in three locations (Stoneham—north of Boston, Plymouth—south of Boston, and Springfield—in the western part of the state). The educators invited to the focus groups were selected through a stratified random sampling procedure, ensuring equal numbers of districts invited from each of the six geographical regions identified on the Massachusetts Department of Education (DOE) database. Invitation letters for focus groups were sent to superintendents from 25 districts for each of the three locations. Letters were also sent to the principals of randomly selected elementary, middle, and high schools (one of each level from the same districts) inviting them to attend a focus group at the same location at a different time. Principals were asked to share and post focus group invitations for teachers in their schools. Invitation letters explained the purpose and plan for the research study. Follow-up calls were made to encourage attendance. Each focus group (8-15 participants) included a 90-minute discussion with a facilitator and notetaker present. Focus group discussions were also tape recorded.

This strategy of beginning with in-depth focus group discussions was used in order to: provide opportunities for educators to participate in thought-provoking discussions in which they were able to share and reflect on their experiences with change-making using MCAS; and to inform the development of questionnaires that were distributed during Stage 2 to a broader, statewide sample of these groups. The focus group participants also served as rich resources for beginning to identify and gather more in-depth information conceming practices in schools and districts that the educators polled deemed to be effective.

**Stage 2 Data Collection** – Based on collaborative discussions with the funding organization and findings of the extensive focus group work, questionnaires were developed and piloted. Finally, the questionnaires were distributed in the following manner.

- All superintendents in the state received a questionnaire to complete.

- A stratified random sample of districts was then drawn, identifying 120 school districts (and combined school districts) from six different geographical areas (determined by the Massachusetts Department of Education listing). From the DOE listing of schools in the state, another sub-sample was drawn randomly selecting one school from each level (elementary, middle, and high) contained within that district.

- Questionnaires were then sent in care of the superintendent in the selected districts, requesting that questionnaires or questionnaire packets be delivered to:

- Three district curriculum directors/supervisors where that position exists; and

- The three selected schools (questionnaires for the principal and three teachers in each school).

**Stage 3 of Data Collection** – The researchers conducted telephone interviews and site visits to gather additional information about effective strategies for using MCAS for school and district improvement from educators who volunteered through the focus groups or questionnaires. Well over 100 calls were made, as well as numerous site visits.

**Stage 4: Report and Dissemination of Information about Initially Successful Practices** – In addition to this written research report, a fall dissemination session is planned for sharing of the findings of this study with educators throughout the state.

# FINDINGS

The Findings section of this report presents the findings from the focus groups, telephone interviews, site visits, and the four sets of questionnaires (for superintendents, curriculum directors, principals, and teachers). See Appendix A for blank questionnaires and a complete list of districts from which questionnaires were received.

Educators from 36 districts participated in focus group discussions held in Stoneham, Plymouth, and Springfield. Focus group participants included 21 superintendents, 21 principals, and 17 teachers. A list of participating districts appears in Appendix B.

Completed and usable questionnaires were received from:

- 131 of the superintendents, for a 44% response rate.
- 166 principals from 87+ districts. (Some principals did not identify their districts.) This comes to 73% of the districts in the sample that submitted principal questionnaires. The percentage response of principals was 46% (166 of 360).
- 86 curriculum directors from 50+ districts. (Some curriculum directors did not identify their districts.) This comes to 42% of the districts in the sample that submitted curriculum director questionnaires. The percentage response of curriculum directors was 24% (86 of 360). Please note that many districts do not have curriculum director positions.
- 379 teachers from 91 districts. (Some teachers did not identify their districts.) This comes to 76% of the districts in the sample that submitted teacher questionnaires. The percentage response of teachers was 37% (397 of 1080).

It should be noted that the participation of teachers both in focus groups and questionnaire completion was lower than hoped, with no clear explanation except the many priorities competing for their time.

Overall, completed questionnaires were received from a total of 155 identified school districts (and a few that were unidentified), yielding responses from about half the districts in the state. Sample representation from across the six Department of Education (DOE) geographical regions, as well as across the DOE's seven categories of school communities was very close to the population breakdowns of districts across the state. See Tables 1 and 2 below.

**Table 1: Distribution of Sample by Geographical Regions**

| GEOGRAPHICAL REGION | PERCENT OF DISTRICTS RESPONDING IN SAMPLE | PERCENT OF OPERATING DISTRICTS IN THE STATE |
|---|---|---|
| Greater Boston | 17% | 14% |
| Northeast | 21% | 16% |
| Central | 22% | 24% |
| Southeast | 23% | 25% |
| Springfield Area | 10% | 10% |
| Pittsfield Area | 7% | 11% |

**Table 2: Distribution of Sample by DOE Community Description Categories**

| TYPE OF COMMUNITY | PERCENT OF DISTRICTS RESPONDING IN SAMPLE | PERCENT OF OPERATING DISTRICTS IN THE STATE |
|---|---|---|
| Urbanized Center | 22% | 15% |
| Economically Developed Suburbs | 24% | 21% |
| Growth Communities | 14% | 16% |
| Residential Suburbs | 19% | 17% |
| Rural Economic Centers | 14% | 16% |
| Small Rural Communities | 5% | 7% |
| Resort/Retirement and Artistic | 3% | 9% |

In addition, the list of districts from which questionnaires were received was compared to analyses of 1999 MCAS results reported in the Boston Globe in December 1999. Thirty-four of the responding districts were listed among the 50 districts from across the

state that showed the greatest improvement in MCAS scores from 1998. These 34 districts made up 22% of the overall sample of districts that responded to the survey.

Another analysis was presented in the Globe, ranking the 210 districts in the state that administered MCAS in English, mathematics, science and technology in all three grades. One hundred and twenty-nine of the districts responding to the survey were included in this analysis, with almost identical percentage of responding districts in the top (35%), middle (30%), and bottom (37%) rankings, indicating that responding districts were almost evenly distributed across these overall categories of student achievement scores.

The findings from all sources of data are organized in the following sections:

- Changes Being Made Based on MCAS Results
- Data Preparation, Dissemination
- District-Level Communication, Incentives, and Leadership
- Data Use Processes
- Challenges Facing Schools and Districts.

## FINDINGS: Changes Being Made Based on MCAS Results

***Finding #1: Over 90% of all groups surveyed indicated that curricular changes have been made or identified based on MCAS results, with lesser percentages noting changes in instruction, assessment, and allocation of resources.***

When asked if changes in curriculum had been made or identified based on MCAS results, over 90% of all four groups indicated that such changes had been made. Proportions of these groups indicating changes in instruction ranged from 87% for curriculum directors to 92% of principals. Results conceming assessment changes hovered around 80%, whereas the percentages of these groups indicating changes in allocation of resources were much lower, with the exception of superintendents of whom 83% noted changes made in this area. See Table 3.

**Table 3: Types of Changes Made Based on MCAS Results***

| TYPE OF CHANGE MADE OR IDENTIFIED BASED ON MCAS RESULTS | % OF SUPTS. | % OF CURRICULUM DIRECTORS | % OF PRINCIPALS | % OF TEACHERS |
|---|---|---|---|---|
| **Changes in Curriculum** | 98% n=130 | 93% n=80 | 95% n=162 | 93% n=367 |
| **Changes in Instruction** | 91% n=123 | 87% n=82 | 92% n=151 | 88% n=343 |
| **Changes in Assessment** | 82% n=119 | 80% n=75 | 83% n=153 | 78% n=344 |
| **Changes in Allocation of Resources** | 83% n=119 | 62% n=79 | 67% n=159 | 55% n=317 |

* Some respondents did not answer all questions. Therefore the n's are slightly variable.

***Finding #2: Low scores in general or in specific curricular areas as well as low scores on open response items and writing compositions were cited as findings prompting changes made in curriculum, instruction, assessment, and allocation of resources.***

All survey respondents were asked to indicate specific MCAS results that prompted the changes they described in the areas of curriculum, instruction, assessment, and allocation of resources. The most frequent response for all four groups was simply low scores in general (or lower than desired). Lesser proportions of the various groups mentioned lower than desired scores in specific areas such as math, English/language arts, and science.

Also cited by many of the respondents were the MCAS results for open response items. This was a particularly important finding that prompted instructional changes according to the educators surveyed (ranging from 21% to 36% in the four groups), and likewise, a result that prompted changes in classroom assessment practices according to a range of 28% to 35% of the different groups surveyed. Many educators in the surveys and in the focus groups noted insights they gained from conducting item analysis of MCAS scores as well as studying the general content and format of the tests themselves.

***Finding #3: Decision-making about curricular and other changes commonly involves collaborative team efforts among teachers, principals, curriculum directors, and central administrators.***

For all four areas of change, the greatest proportion of each of the four responding groups of educators indicated the involvement of school administrators and teachers, and to a somewhat lesser degree the work of curriculum coordinators and central administrators including superintendents and assistant superintendents. Guidance counselors were rarely mentioned as being involved in decisions being made. A variety of team or committee configurations were mentioned including grade level teams,

vertical subject area teams across grades, and curriculum and professional development committees.

***A Positive Practice from the Field:*** A high school team attended a professional development session with an outside organization focusing on data analysis. Team members indicated that they benefited from exposure to ways other schools and districts were doing MCAS item analysis. Subsequent department meetings at the high school level focused on curriculum mapping, aligning curriculum to standards, analyzing tests and answers, and linking MCAS questions with learning standards. Close analysis of questions and student responses yielded summaries of content gaps and curriculum modifications needed. All 9th and 10 grade teachers created MCAS preparation and remediation plans linked to instruction (increased writing, rubric use, focus on open response questions). Further teamwork in conjunction with the guidance department resulted in development of student profiles for ninth graders in failing and needs improvement categories, which include specific instructional recommendations. Student analysis forms were used to document current information and recommendations for teacher instruction and follow up courses to improve student results. Remedial courses were then implemented for 8th and 10th grade students. Plans for further improvements include professional development in writing standards-based curriculum/instruction unit plans, using student profiles and test question analysis, and writing monthly instructional follow-up reports and unit plans.

***Finding #4: Most commonly cited changes made in curriculum, instruction, and assessment based on MCAS results were indicated in English/Language Arts, mathematics, and writing. Most commonly cited changes in allocation of resources included providing professional development and curriculum work, obtaining new textbooks and materials, providing MCAS support for students, and, to some extent, hiring of staff.***

**Curriculum changes --** The most common types of significant curriculum changes cited as examples in open-ended questions were indicated in the areas of English/language arts, mathematics, and writing across the curriculum and use of graphic organizers. Others mentioned included test taking skills and MCAS support for students. See Table 4 below.

**Table 4: Most Commonly Cited Curriculum Changes***

| EXAMPLES OF SIGNIFICANT CURRICULUM CHANGE: | % OF SUPTS n=124 | % OF CURRICULUM DIRECTORS n=76 | % OF PRINCIPALS n=148 | % OF TEACHERS n=342 |
|---|---|---|---|---|
| • ELA change | 20% | 16% | 7% | 10% |
| • Math change | 18% | 14% | 23% | 13% |
| • Science change | 8% | 8% | 9% | 9% |
| • Social studies change | 8% | 4% | 8% | 7% |
| • Writing across the curriculum and use of graphic organizers | 12% | 14% | 21% | 19% |
| • Use of more open response questions | 6% | | 15% | |
| • Test taking skills, including vocabulary | | 13% | 3% | 14% |
| • MCAS support classes or tutoring during school, after school, summer, weekends | 2% | | 8% | 19% |

*Not all respondents who indicated changes made, e.g., in curriculum, provided examples of these changes.

Questionnaire and focus group results showed considerable changing of sequence of courses, especially in mathematics, English, and social studies, as well as deletion of courses in industrial arts, home economics, and general math and business courses. Grade 9 courses in technology were cited frequently as an addition. See Table 5 below.

**Table 5: Most Commonly Cited Curricular Areas in Which Courses Were Added or Eliminated**

| COURSES ADDED | % OF SUPTS. n=74 | % OF CURRICULUM DIRECTORS n=39 | % OF PRINCIPALS n=96 | % OF TEACHERS n=367 |
|---|---|---|---|---|
| ELA | 15% | 15% | 19% | 13% |
| Math | 24% | 28% | 25% | 21% |
| Science | 7% | 5% | 13% | 12% |
| Social Studies | 18% | 13% | 21% | 15% |
| Technology | 8% | 10% | 7% | 3% |
| MCAS math | 8% | 5% | | 2% |
| MCAS science | 3% | 3% | | |
| MCAS ELA | 3% | 8% | | 2% |
| MCAS support—other | | 3% | | 23% |
| Foreign Language | 4% | | 5% | 2% |
| **COURSES ELIMINATED** | **% OF SUPTS. n=49** | **% OF CURRICULUM DIRECTORS n=29** | **% OF PRINCIPALS n=65** | **% OF TEACHERS n=94** |
| ELA | | 10% | 2% | 3% |
| Math | 22% | 24% | 23% | 22% |
| Science | 8% | 10% | 12% | 11% |
| Social Studies | 18% | 17% | 14% | 14% |
| MCAS ELA | | | | 15 |
| Industrial arts, home economics | 4% | 3% | 11% | 5% |
| Electives | 4% | 7% | 3% | 4% |
| Other, e.g., business, general courses | 18% | 14% | 6% | 8% |

Material was added to or eliminated from existing courses or curricula in order to match MCAS test requirements, predominantly in the areas of mathematics, English/language arts, science, and social studies. See Table 6 below.

**Table 6: Most Commonly Cited Curricular Areas within which Material Was Added or Eliminated**

| MATERIAL ADDED WITHIN THESE CURRICULAR AREAS | % OF SUPTS. N=40 | % OF CURRICULUM DIRECTORS n=27 | % OF PRINCIPALS n=56 | % OF TEACHERS n=109 |
|---|---|---|---|---|
| ELA | 15% | 7% | 9% | 8% |
| Math | 10% | 7% | 14% | 16% |
| Science | 3% | 4% | 14% | 16% |
| Social Studies | 23% | 26% | 16% | 17% |
| Technology | 10% | 15% | 7% | 5% |
| MCAS general support | | 26% | 42% | 4% |
| Study skills | 13% | | | |
| Writing across curriculum | | 7% | 14% | 8% |
| Foreign Language | 5% | | 4% | 2% |
| Other, e.g., problem-solving, new books | 13% | 4% | 4% | 15% |
| None yet | 18% | 11% | 23% | 8% |
| **MATERIAL ELIMINATED WITHIN THESE CURRICULAR AREAS** | **% OF SUPTS. N=32** | **% OF CURRICULUM DIRECTORS n=17** | **% OF PRINCIPALS n=41** | **% OF TEACHERS n=53** |
| ELA | | 6% | | |
| Math | 3% | 12% | 5% | 6% |
| Science | 3% | 18% | 7% | 11% |
| Social Studies | 19% | 18% | 7% | 21% |
| None yet | 41% | 18% | 54% | 32% |

***A Positive Practice from the Field:*** Teachers in a middle school met by subject area. They analyzed student responses on MCAS open-ended questions and then made recommendations for curriculum modifications, specifically in the areas of drama and earth science. Teachers indicated that through their MCAS analysis and curriculum development that they better understood each other's areas of expertise and that collaboration within teaching teams improved.

***A Positive Practice from the Field:*** Item analysis of questions by a team of teachers and an administrator at the high school level identified areas of weakness and necessary curriculum adjustments. As a result of this work, staff took action to:

- address vocabulary weaknesses in test taking skills;
- respond to the large number of technology questions on test by adding a mandatory technology class for all freshmen;
- eliminate Civics and replace it with American Government in senior year;
- implement freshman and sophomore levels of World History I and II;
- add an integrated science class;
- eliminate consumer math and transitional math classes;
- assure that all students take Algebra I and Geometry; and
- adjust student schedules to include additional daily classes to meet the needs of different learners.

**Instructional Changes --** When educators were asked in the survey about changes made in instruction, once again, the greatest numbers indicated changes in writing instruction including use of graphic organizers, writing across the curriculum and use of more open response questions. Other changes mentioned less commonly included increase in math problem solving, using a greater variety of teaching strategies, and general MCAS-related activities. See Table 7 below.

**Table 7: Most Commonly Cited Changes in Instruction***

| EXAMPLES OF SIGNIFICANT INSTRUCTIONAL CHANGES: | % OF SUPTS. n= 97 | % OF CURRICULUM DIRECTORS n=67 | % OF PRINCIPALS n=131 | % OF TEACHERS n=310 |
|---|---|---|---|---|
| Math inquiry, problem solving, projects | 7% | 4% | 3% | 1% |
| Writing, writing across the curriculum, using graphic organizers for writing | 21% | 39% | 36% | 27% |
| Use of more open response questions | 14% | 12% | 25% | 20% |
| Use of rubrics with students | 3% | 6% | 10% | 4% |
| Greater variety of teaching strategies | | 9% | 1% | 2% |
| MCAS-related activities, e.g., homework, questions, general support | 1% | 6% | 4% | 12% |
| All students have same texts and instruction | 7% | | | 1% |

*Not all respondents who indicated changes made, e.g., in instruction, provided examples of these changes.

***A Positive Practice from the Field:*** A ninth grade English teacher reports positive results in the classroom with an instrument created to help students approach open-response questions. This teacher modified an existing evaluation instrument that uses mnemonics to enable students to respond to open-ended questions with a step-by-step approach that allows them to gain the best possible score (and know they have achieved it) by addressing all components of an optimum response. This teacher also created MCAS Study Guides with test questions from prior MCAS tests and shared them with other teachers.

***A Positive Practice from the Field:*** A middle school teacher of an alternative class of at-risk students uses writing prompts similar to those on the MCAS long compositions. Students write daily essays and then self assess and assess peer essays using MCAS writing rubrics. Students reportedly gain in writing skill, understanding of MCAS expectations, and confidence in producing high quality compositions.

**Assessment Changes --** The largest proportion of all respondent groups (ranging from 27% to 35%) indicated the use of rubrics with students (especially focused on writing) as an example of changes made in classroom assessment based on MCAS results. Roughly a quarter of each group noted using more open response items, and many mentioned using more performance-based assessments, benchmarks, or portfolios, as well as emphasizing more frequent assessment of student performance. Some mention was made as well of recently developed reading assessments, more writing and problem solving in math, and generally developing assessments that mirror the MCAS. See Table 9below.

**Table 8: Most Commonly Cited Changes in Assessment***

| EXAMPLES OF SIGNIFICANT CHANGES IN ASSESSMENT | % OF SUPTS. n=104 | % OF CURRICULUM DIRECTORS n=55 | % OF PRINCIPALS n=126 | % OF TEACHERS n=257 |
|---|---|---|---|---|
| Performance-based tasks / benchmarks / portfolios | 21% | 16% | 6% | 12% |
| Rubrics | 28% | 27% | 35% | 37% |
| More Open Response | 22% | 24% | 21% | 28% |
| New or Developed reading assessments | 4% | 2% | 8% | <1% |
| Fewer multiple choice, one-word, recall type items | 4% | | 8% | 1% |
| Assessments that mirror MCAS | | 9% | | 5% |
| More writing and problem solving in math | 1% | 2% | 2% | 4% |

*Not all respondents who indicated changes made, e.g., in assessment, provided examples of these changes.

***A Positive Practice from the Field:*** A district team created a standards-based rubric for the writing improvement process. They then gave every student's long composition to former and present teachers who then analyzed the compositions with the rubric. The teachers indicated that this work with actual writing samples improved their ability to identify their students' writing strengths and weaknesses.

***A Positive Practice from the Field:*** A district-wide effort was launched to ensure that all students (not characterized as students with specials needs) have a personalized education plan. This work focused first on students (K-12) in the lowest quartile and those who had not scored well on the MCAS tests. Principals and staff completed an in-depth analysis of each student, documenting the student's: strengths and areas of need (linked to learning standards); current level of performance; approach to learning; and optimum learning setting. They then identified strategies to help the student improve; planned follow up assessment; notified parents; and informally piloted the system. Teachers indicate that they find the plan useful, providing a solid frame of reference for their continuing work with students.

**Allocation of Resources --** The predominant areas of changes in allocation of resources based on MCAS results are in professional development and curriculum work, obtaining new textbooks and materials, providing MCAS support for students (during, before, and after school), and to some degree, hiring of staff. Some focus group participants indicated increased resources allocated to perform additional data analysis, e.g., correlation of MCAS scores with other available data such as attendance, age, and grades of students. See Table 9 below.

**Table 9: Most Commonly Cited Examples of Significant Changes in Allocation of Resources***

| | % OF SUPTS. n=94 | % OF CURRICULUM DIRECTORS n=48 | % OF PRINCIPALS n=68 | % OF TEACHERS n=166 |
|---|---|---|---|---|
| **New textbooks / materials** | 29% | 44% | 34% | 47% |
| **Professional development and curriculum work** | 30% | 33% | 16% | 19% |
| **MCAS support for students** | 27% | | 7% | 2% |
| **Hiring of staff** | 7% | 10% | 3% | 9% |

*Not all respondents who indicated changes made, e.g., in allocation of resources, provided examples of these changes.

***Finding #5: Many survey respondents say that it is too soon to determine the results of curricular and other changes, however, some indicate MCAS score improvement, increases in student writing activities and skill levels, and increases in student and teacher awareness and acceptance of the value of MCAS.***

Roughly one third of all survey groups indicated that it was too soon to tell what the results are of the changes implemented in curriculum, instruction, assessment, and allocation of resources. However, some (2%-20% of the various groups) did indicate increase in MCAS scores that they attributed to changes made. Other results mentioned most often were more writing, improved writing, and improved open-ended responses.

Other results from these changes gleaned from surveys and focus groups include increased awareness of the importance of MCAS; increased student and teacher understanding of MCAS expectations; improved student attitudes concerning MCAS, e.g., willingness to try, confidence in test taking; increased communication and collaboration among teachers stemming from MCAS related work; improved instruction focused on the needs of students; and use of a greater variety of assessment strategies in classrooms.

## FINDINGS: Data Preparation, Dissemination

***Finding #6: Data analysis responsibilities are shared across roles in districts, particularly among central office personnel, principals, curriculum directors, and school and subject area teams of teachers.***

Superintendents and curriculum directors in describing data analysis responsibilities indicated that this was a responsibility shared by many. Seventy-six percent of the superintendents surveyed said that they were responsible for data analysis, as well as 82% indicating responsibility of the principals and over 60% mentioning this as a responsibility of school and subject area teams. Seventy-one percent of curriculum directors indicated their own responsibility for data analysis, as well as 71% indicating principals and 59% mentioning subject area teams.

Principals (97%) and teachers (79%) pointed to the responsibility of the principal in this domain. About half of each group indicated the responsibility of subject area teams of teachers and 39% of teachers and 49% of principals indicating responsibility of grade level teams.

When asked if they had been personally involved in analyzing the MCAS results, 99% of curriculum directors, 95% of principals, 82% of teachers, and 76% of the superintendents indicated that they had. See Table 10.

**Table 10: Percent of Educators in Four Groups That Personally Analyzed MCAS Results***

| CONSTITUENCY | % YES | % NO |
|---|---|---|
| **Superintendents, n = 131** | 76% | 24% |
| **Curriculum Directors, n = 85** | 99% | 1% |
| **Principals, n = 165** | 95% | 5% |
| **Teachers, n = 339** | 82% | 18% |

* Some respondents did not answer all questions. Therefore the n's are slightly variable.

***Finding # 7: MCAS results are being disseminated to the school level to principals and teachers with data disaggregated most commonly by grade level, curriculum area, sub-scores by curriculum areas, and test item, and less frequently by race/ethnicity, gender, or feeder school.***

One hundred percent of the responding superintendents indicated that they had provided the data to all the schools in their districts, with 98% to the principals and 68% to all faculty/staff. Similar responses were received from the curriculum directors, principals, and teachers, indicating receipt of the data from their superintendents.

The four groups of respondents were consistent in their responses about the level of analysis of their districts' results, with over 90% of all indicating analysis by grade level and curriculum area. Half of the teachers and 69% to 76% of principals, curriculum directors, and superintendents indicated the provision of sub-scores in the curriculum areas. Less than 15% of all groups said they received breakdowns in the areas of race/ethnicity or gender. (Note that the lack of breakdown by race/ethnicity may be related to low diversity in some districts.) Roughly two-thirds to three-quarters of each of the groups mentioned results analyzed by school.

Over 90% of each group indicated school results broken down by grade level and curriculum areas, 70-80% of all groups pointing to breakdowns by curriculum sub-scores and test items. The percentages were again low by gender and race/ethnicity, as well as in the area of analysis by feeder schools. See Table 11.

**Table 11: Level of Analysis of District and School MCAS Data Provided***

| LEVEL OF ANALYSIS | % OF SUPTS. | % OF CURRICULUM DIRECTORS | % OF PRINCIPALS | % OF TEACHERS |
|---|---|---|---|---|
| **DISTRICT RESULTS BY:** | **n=127** | **n=83** | **n=157** | **n=350** |
| • Grade level | 97% | 93% | 94% | 94% |
| • Curriculum area | 95% | 93% | 93% | 95% |
| • Sub-scores within curriculum areas | 76% | 70% | 69% | 50% |
| • Race, ethnicity | 13% | 8% | 10% | 3% |
| • Gender | 14% | 10% | 10% | 3% |
| • School | 66% | 77% | 76% | 61% |
| • Other | 14% | 12% | 6% | 1% |
| | | | | |
| **SCHOOL RESULTS BY:** | **n=126** | **n=84** | **n=162** | **n=376** |
| • Grade level | 96% | 93% | 95% | 90% |
| • Curriculum area | 97% | 98% | 98% | 95% |
| • Sub-scores within curriculum areas | 87% | 81% | 87% | 70% |
| • Test item | 83% | 87% | 85% | 80% |
| • Race, ethnicity | 13% | 7% | 8% | 5% |
| • Gender | 17% | 11% | 11% | 3% |
| • Feeder school | 14% | 26% | 15% | 9% |
| • Other | 14% | 6% | 7% | 0% |

* Some respondents did not answer all questions. Therefore the n's are slightly variable.

***Finding #8: Teachers generally receive MCAS results of students who were in their school when tested, but less often the results of students they actually taught during the year of testing or those of students they currently teach.***

Over 90% of the respondents in all groups indicated that teachers received results of students who were in their schools when tested. However, the responses were much lower (22% of teachers and 32% of principals) when respondents were asked if teachers received results of students who are in their schools now but were in feeder schools when tested. Roughly three-quarters of all groups indicated that the teachers received results of students they taught during the year of testing. Thirty-nine percent of teachers and 51% of principals said that teachers received scores for students they currently teach. Responses from all groups pointed to item analysis by school as the most common, although 73% of the principals noted that teachers received item analysis by student. Considerable discrepancies appeared in this item particularly between responses of superintendents and teachers. For example, 60% of responding superintendents indicated that teachers received results of students who were in the teachers' schools now, but in a feeder school when tested, compared with 22% of the teachers. Similar differences in responses of these two groups occurred concerning teacher receipt of MCAS results for students they currently teach. See Table 12.

**Table 12: Level of Analysis of MCAS Results Provided to Teachers***

| LEVEL OF ANALYSIS | % OF SUPTS. n=127 | % OF CURRICULUM DIRECTORS n=84 | % OF PRINCIPALS n=162 | % OF TEACHERS n=376 |
|---|---|---|---|---|
| **RESULTS OF STUDENTS:** | | | | |
| • **Who were in the school when tested** | 94% | 94% | 96% | 91% |
| • **Who are in the school now, but were in a feeder school when tested** | 60% | 52% | 32% | 22% |
| • **That the teachers taught during the year of testing** | 79% | 70% | 75% | 69% |
| • **That they currently teach** | 77% | 56% | 51% | 39% |
| **ITEM ANALYSIS BY:** | | | | |
| • **District** | 68% | 68% | 62% | 48% |
| • **School** | 83% | 85% | 90% | 71% |
| • **Class group** | 37% | 27% | 30% | 21% |
| • **Student** | 65% | 45% | 73% | 50% |

* Some respondents did not answer all questions. Therefore the n's are slightly variable.

***A Positive Practice from the Field:*** The supervisor of guidance prepared item analysis of eighth grade MCAS test results showing the detail of individual student responses. Results of this breakdown were given to the students' ninth grade teachers. This allowed the opportunity for the teacher, armed with this knowledge, to work with this student for some of the year. Department heads worked with teachers by discipline groups. They further analyzed eighth grade responses to evaluate and modify curriculum and instruction, while examining alignment to standards/frameworks. The district provided a staff development day for teachers to analyze and discuss the data, as well as follow-up workshops concerning curriculum components.

***Finding #9: The usefulness of MCAS results, particularly for teachers to use in supporting their current students, is limited by the receipt of student results several months into the school year.***

The issue of the lateness of the MCAS results was raised in virtually every focus group discussion by superintendents, principals, and teachers and often mentioned in the questionnaire responses. Teachers, particularly, feeling the pressure to provide targeted support for their current students in preparing for MCAS, found receipt of student scores halfway into the school year to be problematic. Twelve percent of the superintendents who were asked on the questionnaire what they found most challenging in terms of providing MCAS results in a useful form to schools indicated the lateness of the receipt of the results from the state.

***Finding # 10: Teachers indicate that working with MCAS results has an effect on their choices of instructional strategies. They find it motivating when: 1) they have ready access to the MCAS data; 2) they have opportunities to work together with colleagues; and 3) they are encouraged to do this work by school and district administrators.***

The teacher questionnaire asked teachers to respond to a scaled question indicating to what extent working with MCAS results (if they had done so) had an effect on the choice of instructional strategies that they use in their own classrooms. As Figure 1 shows below, 71% responded with either a 4 or 5 on the 5-point scale (with 5=to a great extent).

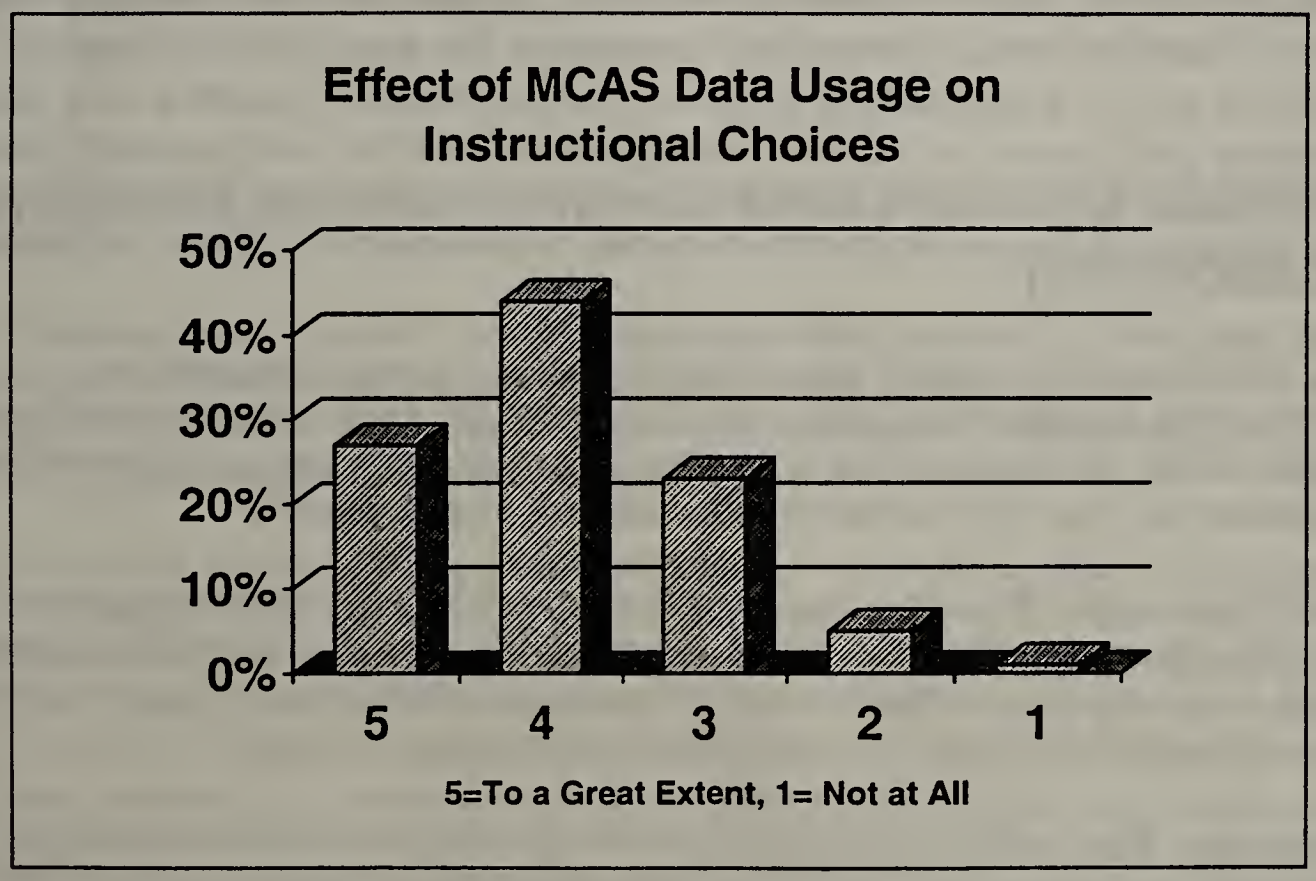


**Figure 1: Extent to which teachers who have worked with MCAS results believe this work has had an effect on the choice of instructional strategies that they use in their own classrooms, n =346 teachers, mean response = 3.90**

Over 50% of each group surveyed wrote that they had received MCAS results through in-person meetings of some sort. Smaller percentages indicated that results were routed through other people such as department heads or principals or that they had simply received hard copies.

In focus groups of teachers the contrast was striking between different settings (on the secondary level) where the major variables were messages concerning MCAS responsibilities and access to MCAS results. Many teachers who participated in these discussions were highly motivated and even exhilarated to work together with colleagues to examine MCAS results and discuss and recommend changes in course content and sequence as well as classroom instructional and assessment strategies. These teachers felt that they had been invited and enlisted to do this work by their district and school administrators. The message they heard was that they had a charge to do this work, that their efforts were critically important for their students, and that everyone in their school and district carried equal responsibility for contributing to the effort to improve student learning. These professionals had ready access to MCAS results as they became available. In contrast, teachers from other districts shared very different experiences—extreme frustration resulting from repeated requests for results that were ignored or refused by their central office, coupled with administrative finger-pointing and public blaming of secondary teachers as the weak link in the system.

## FINDINGS: District-Level Communication, Incentives, and Leadership

***Finding #11: Superintendents and other district and school leaders are communicating expectations about the use of MCAS data, with the most common messages being the importance of making appropriate changes in curriculum and the need to meet the overall goal for district improvement.***

Ninety-eight percent of the superintendents indicated that they had communicated expectations for use of MCAS results to their principals, and 92% to their faculty/staff. Over 90% of the curriculum directors and principals and 73% of teachers noted that their superintendents had communicated such expectations to them.

All groups were then asked to share what expectations their superintendents had communicated to them. The greatest percentage of each group (from 35% to 46%) fell in the area of making changes in the curriculum, particularly alignment with curriculum frameworks. Other common responses included meeting the overall goal for district improvement (31% of teachers and 30% of principals) and using data analysis to identify strengths and weaknesses in student achievement (22% of curriculum directors, 17% of principals, and 5% of teachers). Other expectations mentioned to a lesser degree included: providing/participating in professional development opportunities; providing MCAS support for students in need; making changes in instruction, assessment, and allocation of resources; and focusing efforts on test-taking skills.

Superintendents, curriculum directors, and principals were asked what expectations they communicated to teachers and teachers what expectations they heard from their principal. Once again, the loudest message seems to have been to make curriculum changes, aligning school/district curriculum to the frameworks (36% of superintendents, 38% of curriculum directors, and 35% of principals). The largest percentage of teachers (24%) also indicated that this was an expectation communicated by their principals.

In separate focus group discussions of superintendents, principals, and teachers, the messages that were deemed most effective by many participants were:

- that MCAS results are an important and useful tool to improve student learning;
- that MCAS is an important part of the picture of student achievement, but not the only piece; and
- that the responsibility for improvement of student achievement (MCAS being one measure) lies with every educator in the district.

Some focus group participants also strongly emphasized the responsibility that parents share.

***Finding #12: Although incentives for principals and teachers to use MCAS results to make changes are not broadly recognized, some that were noted include monetary incentives, time provided for curriculum alignment and professional development, and opportunities to see students improve as changes are made.***

Survey questions were asked about the existence of incentives for principals, teachers and curriculum directors to use MCAS results to make changes in curriculum, instruction, and other areas. Answers were fairly consistent from across groups, all with less than 30% saying that incentives do exist.

When asked the nature of these incentives, 37% of the superintendents who said there were incentives (n=35) mentioned money incentives for administrators; 24% of the principals, 33% of the curriculum directors, and 24% of the teachers indicated that money incentives are in place for teachers as well. These include stipends, raises, workshop fees, and pay for data analysis, curriculum alignment, and working on teams to address issues. Superintendents and principals noted that the expectation for using MCAS is a part of professional job performance. Superintendents also noted that the publishing of scores and competitiveness among schools serve as incentives for others. Principals, curriculum directors, and teachers all noted the intrinsic reward of seeing students improve. Principals noted time as an incentive—time for teachers to work together, attend inservice and other workshops. Teachers valued release time, inservice time, and time to work with colleagues. Numerous opportunities for professional development were noted by teachers, curriculum directors, and principals. Teachers also valued the provision of substitutes, additional support from lead teachers, new materials, and time to work on curriculum alignment.

Most focus group participants found it difficult to think of existing incentives, although several superintendents and principals noted administrative contract agreements that linked MCAS improvement to school administrator salary increases.

***Finding #13: Educators surveyed take action in a variety of leadership roles in order to promote positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students.***

Questionnaires asked all respondents to describe important actions they took as leaders in order to promote positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students. The superintendents most commonly described leadership actions of a broad nature, including: providing a clear statement of the importance of MCAS (31%); providing support and resources for MCAS improvement activities, including curriculum work and data analysis (19%); and providing and communicating about MCAS results to staff and parents (18%).

Actions indicated by curriculum directors lay mainly in the areas of providing support and resources for MCAS improvement activities, including curriculum work and data analysis (47%) and providing resources and support for professional development (22%).

Principals focused mainly on providing support and resources for MCAS improvement activities, including curriculum work and data analysis (38%), and, to a lesser extent, on providing a clear statement of the importance of MCAS (10%) and communicating about and supporting standards-based teaching (10%).

Leadership actions stated by teachers were more broadly distributed in the areas of focusing on open response questions, writing, and test-taking strategies with students (14%); sharing ideas, strategies, resources with other teachers (12%); providing support and resources for MCAS improvement activities, including curriculum work and data analysis (11%); communicating and supporting standards-based teaching (9%); and creating lessons, tools, new curriculum, MCAS support programs (9%). Table 13 below shows the most frequent responses provided to this open-ended question by each group.

**Table 13: Most Frequently Cited Leadership Actions**

| ACTIONS TAKEN AS A LEADER | % OF SUPTS. n=121 | % OF CURRICULUM DIRECTORS n=78 | % OF PRINCIPALS n=144 | % OF TEACHERS n=285 |
|---|---|---|---|---|
| Providing a clear statement of the Importance of MCAS | 31% | 3% | 10% | |
| Providing support and resources for MCAS improvement activities, including curriculum work and data analysis | 19% | 47% | 38% | 11% |
| Providing and communicating about MCAS results to staff, parents | 18% | 13% | | |
| Communicating and supporting standards-based teaching | 2% | 3% | 10% | 9% |
| Providing resources and support for professional development | 12% | 22% | 4% | 6% |
| Creating lessons, tools, new curriculum, MCAS support programs | | | | 9% |
| Focusing on open response questions, writing, and test-taking strategies with students | | | | 14% |
| Sharing ideas, strategies, resources with other teachers | | | | 12% |

# FINDINGS: Data Use Processes

***Finding #14: School administrators most commonly participate in district-wide workshops and cross-school administrator working groups in order to learn from MCAS results and use them effectively. Teachers most commonly participate in school-based grade level or subject area working groups. These working groups collaborate to make changes in curriculum and other areas, and also contribute to improved communication among teachers and increased buy-in to school and district improvement efforts.***

Almost 70% of the superintendents indicated that administrators were provided with district-wide workshops to learn about how to analyze data. Sixty-two percent indicated that district-wide workshops for administrators were also provided to help them learn from MCAS results and how to use them effectively.

The same kinds of questions (in checklist form) were asked of superintendents, curriculum directors, principals and teachers, concerning the types of learning opportunities made available to teachers. Responses were fairly consistent across groups, with between 50% and 78% of respondents from all groups indicating district-wide and school-based workshops. The most prominent method for engaging teachers to work with their own MCAS results and use them effectively was school-based grade level or subject area working groups indicated by 90% of superintendents, 87% of curriculum directors, 91% of principals, and 76% of teachers.

***A Positive Practice from the Field:*** All staff and administrators attended a half day data analysis workshop, "Making Data Work for You," facilitated by a consultant. Art, music, health and physical education teachers also attended to reduce fragmentation in accountability. Teams of teachers from different grade levels reviewed MCAS results and discussed student strengths and weaknesses identified. They then generated strategies to address these gaps. Each team reviewed a separate section of data and reported out to the whole group, establishing a shared understanding and sense of accountability. The workshop assessment included the opportunity for teachers to outline their own next steps. Teachers reported that the greatest value in this experience lay in the opportunity to share ideas and to discuss impact and expectations of MCAS adjustments in their own classrooms.

Focus groups yielded many examples of collaborative efforts among teachers such as district-wide vertical teams by subject area; district-wide grade level teams; and school-wide vertical teams by subject area. Examples of results of these included: 1) middle school science teachers across grades--revision of middle school science content and sequence to include a content area in which students scored poorly and which was not covered at any grade level; and 2) elementary teachers of language arts (across grades)—revision of curriculum to consistently include writing process and graphic organizers across grades.

Teachers in focus groups spoke very highly of their experiences in reviewing together MCAS results including written compositions and in aligning curriculum to the frameworks based on these results. For some teachers, particularly those at the high school level, this sort of collaborative work was new. Many who participated in cross-grade groups were excited to learn what teachers at other grade levels were doing with their students. They greatly valued the collegial discussions, sharing, and problem solving and felt that this experience allowed them to make significant contributions toward a focused goal for improved student achievement.

On the written questionnaires all groups were asked to respond to a five-point scaled item, "To what extent do you believe that working with MCAS results is serving as a positive stimulus for educators in your district to work together toward common purposes based on identified student needs," with (5) meaning to a great extent, and (1) meaning not at all. On this scaled item, 62% of the superintendents gave a rating of (4) or (5); 50% of curriculum directors; 54% of principals; and 40% of teachers. See Figure 2 below.

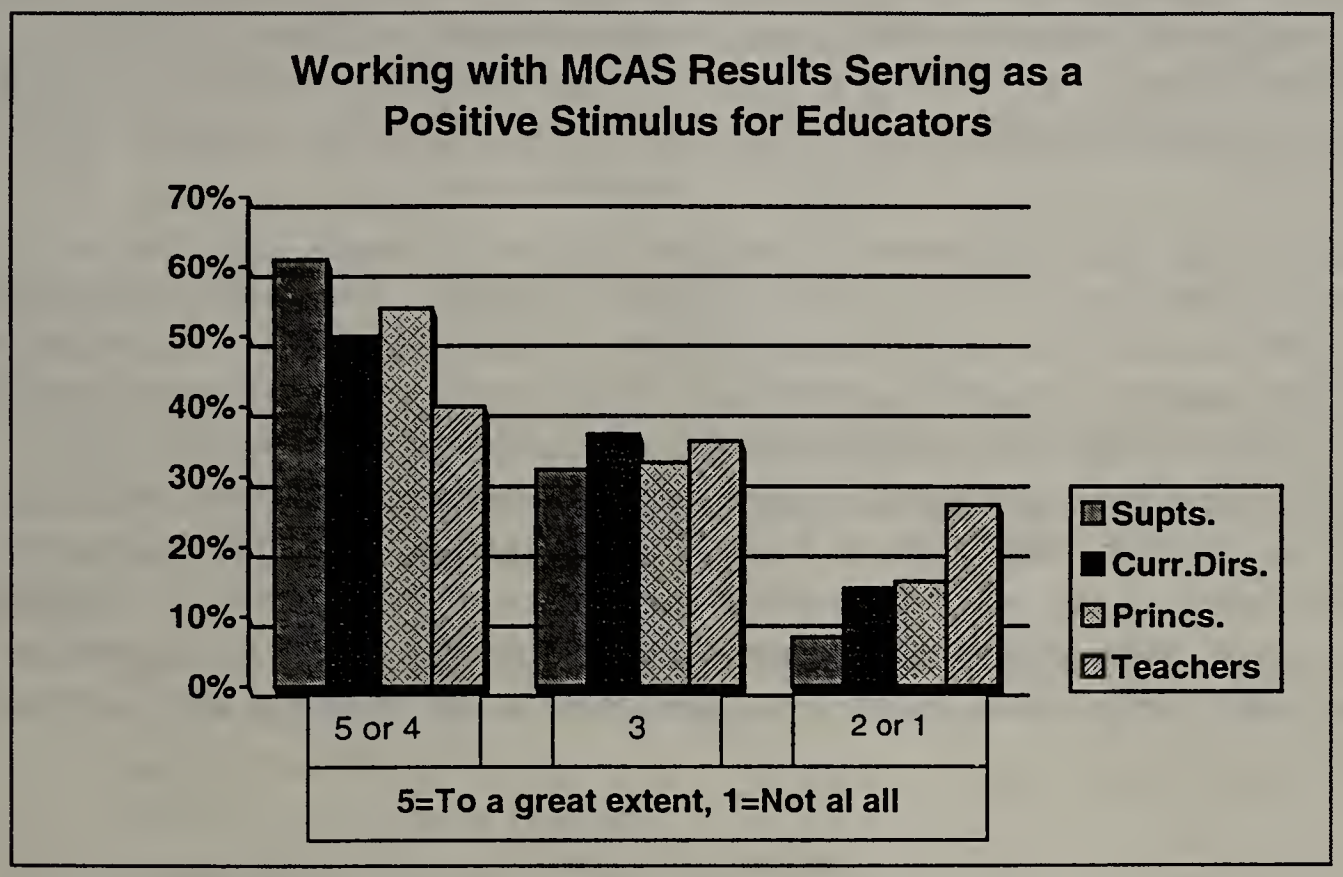


**Figure 2: Extent to which respondents believe that working with MCAS results is serving as a positive stimulus for educators in their districts to work together toward common purposes based on identified student needs. n = 130 superintendents (mean of 3.80); n = 84 curriculum directors (mean of 3.51); n = 165 principals (mean of 3.52); n = 372 teachers (mean of 3.16).**

***A Positive Practice from the Field:*** Cross-district grade level teams came together with the Director of Curriculum and Instruction in four half-day sessions with an overall focus on standards-based teaching. During the first session teams examined and compared current curriculum with frameworks; scrutinized MCAS questions and student responses; and unveiled student weaknesses and associated gaps in the curriculum. The second session focused on standards-based instruction, curriculum mapping, and examining specific content—in this case, science. During the third session grade level teams mapped out science units for their grade levels. The fourth session included extensive opportunities for teachers to examine student work, using their own samples and discussing what constitutes excellence. Teachers highly valued the opportunity for sharing, collaborative planning, and general collegiality.

***A Positive Practice from the Field:*** Vertical teams of teachers from each content area in grades 1-6 gathered to scrutinize MCAS questions and to do a complete error analysis on their students' results. They then generalized patterns of errors, finding many in the area of English/language arts. (Several incorrect questions related to poetry and poetry analysis.) Teachers discussed expectations for what students would need to know and which skills needed to be taught at which level in order to be prepared for the fourth grade MCAS tests. It was felt that a more coherent view of the building of learning for children resulted, and teachers had a shared understanding of which skills to teach at each grade level. Further analysis led to realigning curriculum and ended some duplication of effort.

**A Positive Practice from the Field—A District-Wide Approach**

***Data Analysis:***

- The assistant superintendent of a small, suburban district analyzed MCAS data, compiling detailed results for every school which included: question and student response analysis; analysis of strengths and weaknesses in items type such as open response and multiple choice; analysis of gaps in content areas. This person then developed and distributed guidelines and a timeline for schools to write an MCAS action plan.
- MCAS Action Teams were created at each elementary school. These included teachers from every grade level, as well as elementary specialists in art, music, physical education and other areas.
- These teams examined results, noting strengths and weaknesses of student achievement, and then compared these to the high benchmarks/standards already in place as district expectations. Release time was provided for this team activity.

***Findings:***

- Some specific problem areas noted were: grammar skills and application to literature; vocabulary; syllabication skills; reading comprehension; and writing organization.
- It was agreed that teachers needed training in teaching writing, time in faculty meetings to share best strategies, and grade level meetings with the reading resource teacher and the media specialist.

***Actions:***

- Every school developed an MCAS Action Plan which was to include:
  - Subject areas addressed
  - Problem areas identified
  - Intervention strategies planned
  - Professional development recommendations
  - Measurable goals for improvement
- Teams submitted Action Plans to the assistant superintendent and all teams reported out a at district-wide meeting.
- A K-12 curriculum council, meeting monthly: reviewed MCAS results; did a full curriculum alignment check; analyzed from the district perspective what individual schools across the district need; and made district-wide recommendations, with special attention to bridge points of grades 5-6 and grades 8-9.

***Initial Results:***

- Strengths/weaknesses identified on the school level as well as district-wide;
- Teachers all had a clearly delineated, public plan, with goals, strategies, timeline, and measurab

**A Positive Practice from the Field—A District-Wide Approach**

***Data Analysis:***

- The assistant superintendent, responsible for MCAS data analysis in a large, urban district, worked with staff to create a district-wide Assessment Center, employing three classroom teachers full time. These teachers analyze data, support curriculum coordinators to develop/revise curriculum, and provide student achievement data and support in using the data to teachers in schools.
- The database constructed for the Assessment Center provides student results for grades 8, 9, and 10, including MCAS, IOWA tests, and classroom grades.
- MCAS tests are scrutinized for content areas and individual components, e.g., literary elements in Language Arts.
- Student results are analyzed for curriculum gaps, as well as student strengths and weaknesses.
- Expansion to services and database for primary and middle school teachers is planned during the 2000-2001 school year.

***Findings:***

Initial findings included needs identified for curriculum alignment. For example:

- Analysis of released MCAS test items revealed questions covering literary elements not being covered in current coursework.
- Lower level mathematics students were unprepared for the algebra sections on MCAS.

***Actions:***

- Teachers receive all available data on their students in September. The class data breakdowns are accompanied by suggestions for changes in curriculum coverage and other practice, e.g., greater emphasis on literary elements.
- Teachers participate in training in data use. The training emphasizes positive use of data through reviewing class needs and choosing appropriate materials that focus on high standards.
- Teachers are encouraged to design assessments with MCAS type questions, e.g., more open response questions rather than emphasis on details/facts.
- Problem of the Week created at all levels to address open-ended questions in mathematics.
- Block scheduling extended to full year to address the needs of lower level math students.
- Ongoing groups are working to align all curricula to frameworks.
- Benchmarks are being created for continual student assessment.

***Initial Results:*** Data analysis ensured that:

- Teachers have detailed information on incoming eighth graders and know how to use the data effectively.
- High risk students are identified for remedial help.
- Specific content areas identified as problem areas are included in MCAS test preparation courses for $9^{th}$ and $10^{th}$ graders.
- Curriculum alignment efforts are informed by MCAS results.

# FINDINGS: Challenges Facing Schools and Districts

***Finding #15: The greatest challenge for all educator groups was in the area of managing change, ranging from educating parents and the community, to convincing teachers and students, to maintaining balance and a positive atmosphere, to managing to cover required curriculum. Lack of time was a common theme from all four groups as well.***

All four constituencies surveyed were asked to describe (in open-ended questions) their greatest challenge in promoting positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students. The most frequently cited responses are presented in Table 14 below.

**Table 14: Most Frequently Cited Challenges Facing Schools and Districts**

| GREATEST CHALLENGES | % OF SUPTS. n=117 | % OF CURRICULUM DIRECTORS n=78 | % OF PRINCIPALS n=147 | % OF TEACHERS n=322 |
|---|---|---|---|---|
| **Managing change, e.g., getting everyone on board, maintaining positive atmosphere** | 36% | 30% | 36% | 25% |
| **Lack of time** | 14% | 9% | 14% | 17% |
| **Dealing with negative external messages** | 23% | | 3% | 2% |
| **Issues with MCAS results data, especially late receipt** | 17% | 9% | 3% | 7% |
| **Concern for students** | 4% | 6% | 11% | 20% |

- The greatest percentages of all groups (ranging from 25% of teachers to 36% of superintendents) indicated challenges that can be described as **managing change** in their domains: getting everyone on board; ensuring accountability of all; educating parents and community members; convincing teachers and students of the value of MCAS; maintaining balance, momentum, and positive atmosphere; dealing with student and parent apathy; and covering an expanding curriculum.

  Sample Comments about Managing Change:

  *"Changing the perception of teachers that instruction/assessment must change. Helping teachers to understand the connection between MCAS and student achievement. Getting teachers to understand and accept the importance of using data."* *-- a superintendent*

*"My greatest challenge is to create a proactive rather than reactive response to data. Teachers are stressed and overwhelmed."* *-- a curriculum director*

*"With over 300 teachers in [high school] faculty, my greatest challenge as principal is to enlist all of them (not just the ones in testing areas) in the MCAS preparation process. Everyone must view this as a school-wide goal."* *-- a principal*

*"Convincing students how important MCAS is in terms of always trying to do their best and focus on learning."* *-- a principal*

*"My department and I are overwhelmed by the amount of content which needs to be covered in each course. Some students score low because the material has not yet been taught."* *-- a teacher*

- Other challenges raised were **lack of time** (14% of superintendents and principals, and 17% of teachers);

  Sample Comments about Lack of Time:

  *"Unquestionably—TIME! Teachers need time to do this work which they are willing to do and want to do."* *-- a superintendent*

  *"Finding time to work with teachers. Teachers are at times too overwhelmed with the everyday functioning of their classrooms to worry about what the MCAS may tell them."* *-- a curriculum director*

  *" Time! Finding the time for all faculty and staff to come together to brainstorm ideas, implement change, and achieve success."* *-- a principal*

  *"Finding time to collaborate with peers and share ideas and strategies, and attempting to convince students that they can and will succeed."* *-- a teacher*

- **Negative external messages** from the media, community, and political arena (23% of superintendents);

  Sample Comments about Negative External Messages:

  *"Keeping great teachers motivated while the press and government and the DOE continue to whip teachers and the education profession."* *-- a superintendent*

  *"Negative media attention; public criticism by the school committee."* *-- a principal*

- **Issues** with the MCAS results such as misuse and late arrival (17% of superintendents);

  Sample Comments about Issues about MCAS Data:

  *"The lack of timely return of the test scores presents a major challenge. When the MCAS data arrives in December, principals and curriculum leaders must readjust goals that had been set for the school year to reflect the new information for MCAS. This process means that valuable time was lost that could have been targeted to specific students and specific areas of weakness in the program."* *-- a superintendent*

  *"The quality of this year's data was so poor that we had to redevelop the database to make it consistent with last year's data. The information comes too late."* *-- a superintendent*

  *"As an intermediate teacher in the elementary school, I see a gap in sharing results from grade 8 MCAS since it is administered in the junior high. Efforts have begun to encourage dialogue vertically in the elementary schools, however, since we are in separate buildings, it is more difficult for grades 5-8 to share."* *-- a teacher*

  *"Receiving data in November, December of the following school year on students I will not see again."* *-- a teacher*

  *"The biggest challenge is trying to make use of results that are reported too late to be useful and to feel confident about results that are not representative of student knowledge/ability."* *-- a teacher*

- and **concern for students** (20% of teachers).

  Sample Comments about Concem for Students:

  *"Identifying weaknesses and strengths of students and initiating programs for at risk students to meet their needs."* *-- a principal*

  *"One area of concern continues to be the SPED [special education] population. Two years of results have shown that this group is struggling with the Language Arts portion of the test. Developing new instructional techniques in order to boost this population has been very difficult."* *-- a teacher*

Some of the most commonly cited challenges raised in focus groups included:

- retaining good teachers and principals in low-performing schools;
- helping students reduce test-taking anxiety and avoiding increases in student dropout;
- maintaining valuable educational experiences that are not directly tested on the MCAS, e.g., vocational studies, the arts, and school-to-career activities;
- dealing with increased negative competition among schools within a district or among neighboring districts;
- realigning curriculum and making appropriate decisions about acquisition of textbooks and other materials when the state curriculum frameworks continue to undergo significant change; and
- meeting snowballing requirements of time and personnel to provide support and remediation for students who do not fare well on the MCAS.

Superintendents were asked on the questionnaire to share what they found most challenging In terms of providing MCAS results in a useful form to schools. The difficulties cited by the greatest percent of superintendents were the actual data analysis (20% of the respondents), the time required (19%), lateness of the receipt of the results from the state (12%), and problems encountered using the Department of Education data CD.

# REFLECTIONS

Based on the findings of this study, educators in the state are certainly making strides toward using MCAS in the way it was designed—to serve as a tool to support efforts to improve student learning by providing a consistent measure of achievement linked to the statewide curriculum frameworks. Clearly, in the districts that participated in this study (that were regionally representative as well as representative of the variety of types of communities identified by the Massachusetts Department of Education), school and district administration and staff are analyzing, distributing, and studying student achievement data in ways and toward purposes that were rare only a few years ago. Based on this work, they are also making significant changes in the areas of curriculum, instruction, assessment, and allocation of resources. Perhaps most importantly, MCAS results are reaching teachers—the change-makers in the classroom—and teachers are using the data in important ways. Over 70% of the teachers responding to a scaled item on the questionnaire indicated that that their use of MCAS data has had an effect on the instructional strategies they choose to use in their classrooms. The degree to which this sort of activity is taking place in non-participating districts is, of course, unknown. Nevertheless, even though it is still too early to draw many conclusions about the impact

of this work on student learning, clearly these important efforts are moving in a positive direction.

*In this new direction:*

- *A broad range of educators is taking responsibility and ownership of the task of deeply examining student achievement data.* It is no longer just the assistant superintendent or a few others who look carefully for pattems, trends, and reasons for student achievement results being what they are. It is becoming common practice for curriculum leaders, principals, and teachers to take on this responsibility, identifying student strengths and weaknesses, recognizing gaps in curriculum, instruction, and assessment, and making the kinds of changes they believe can make a difference.

  The results of this study show that district and school MCAS scores are being distributed to schools and to teachers and studied in disaggregated form by curriculum area, curriculum area sub-scores, grade level, and by individual item. In some settings many additional analyses or breakdowns are conducted. It has also been learned that access to MCAS results and the timing of these is critical for optimal effectiveness of use to support students. Many teachers participating in this study indicated that they do not receive pertinent MCAS data for students they teach currently, and often not for students they taught during a testing year.

  It seems that district-level communication so far has been primarily to establish the importance of using MCAS results effectively, with a major emphasis on using results to ensure alignment of curriculum to frameworks and identification of curriculum gaps, overlaps, or faulty sequence. Although the point was made again and again in focus groups that curriculum alignment had been underway for years, it is clear that the pressure of MCAS has provided the impetus for much more aggressive focus on the curriculum that is actually taught. Further, teachers are being asked to look beyond what they teach in their own classrooms at their own levels, and to see where the curriculum they teach fits into the whole K-12 picture.

- *Teachers are working together more by grade level, subject area, and across grades*—talking, sharing, comparing, troubleshooting, taking responsibility, and more actively looking at the impact of their teaching on at least one measure of student achievement.

  Clearly the processes devised for engaging educators in studying and using MCAS results are very important, with the most prominent method used for teachers being school based grade level or subject area working groups. Cross grade groupings seem to be particularly effective in identifying curriculum problems, as well as establishing some common instructional approaches across grades.

- *Significant changes are being made in the areas of curriculum, instruction, assessment, and allocation of resources.*

  In addition to the activities and processes that have been created for the analysis, distribution, and discussion of MCAS data, it is clear that educators are making decisions and changes in curriculum based on the student achievement results. Consistently, despite years of resistance to providing algebra to all students by grade 9, now, because of MCAS graduation requirements, that curriculum change is actually happening. Identified missing topics in technology, literature, social studies, and science are also being inserted into or enhanced within curricula. Writing and critical thinking skills are being included across disciplines.

  Changes in instruction and assessment are generally considered much harder to make than curriculum adjustments, especially on a large scale. A large percentage of teachers surveyed indicated that their work in analysis of MCAS results has had an effect on their choices of instructional strategies. The most commonly cited changes in this area are increased writing instruction across the curriculum, and more use of graphic organizers and rubrics for writing assignments. Many teachers indicate more frequent use of writing prompts for students. It seems like teachers are spending a great deal of energy on teaching test taking skills, and particularly helping students respond to open response questions and to explain their thinking and how they arrived at solutions to problems, particularly in mathematics and science. Such changes reflect classroom movement toward mathematics standards of the National Council of Teachers of Mathematics and toward the state curriculum standards in mathematics and science.

  Resources are being allocated for professional development and curriculum review work of teachers, new instructional materials, and additional student support services (focused on improving MCAS success) before, during, and after school.

- *All staff are being held accountable for student achievement, not just those in a few disciplines or grade levels.*

- *Educators throughout the state are developing positive educational practices using MCAS results as a basis* – practices that can be shared with others. Many such practices have emerged through this study (some of them shared in this report) including instructional and assessment practices of individual teachers, data use strategies for groups of educators, as well as whole district approaches to maximizing the use of MCAS in support of student learning.

However, some questions arise as educators in the state move in this new direction:

- Can this analysis of student achievement data become a consistent and important part of the culture of schools and districts? Will it become a way of working and troubleshooting that will be continued, built upon, and deepened?

- Will efforts continue so that more and more teachers and administrators, especially new arrivals to the scene, become adept and comfortable with examining student scores and student work effectively?

- Once significant changes are made in curriculum, instruction, and assessment, will results be revisited year after year to determine the impact of these changes over time within a range of settings, disciplines, and learners?

- Will changes go beyond curriculum as it is written and reach the level of curriculum that is taught?

- Will educators continue to probe and question their instructional and assessment practices and make changes that go well beyond helping students with test-taking skills and writing process?

- Will school and district resources continue to be invested in critical professional development and curriculum review activities that are so vital for educators in our schools?

# RECOMMENDATIONS

It is most clear from this study that timing, communication, attitude, and process matter if MCAS is to achieve its purpose within Massachusetts education reform. Given these and other findings of this study—both encouraging and challenging—we offer the following recommendations:

*To the Department of Education*

- Make it a priority to provide MCAS results to districts before the beginning of each school year, as opposed to November or December. A great deal of momentum and effectiveness of use is lost by not having the data available in a timely manner.

- Listen and respond to suggestions from the field, especially concerning the quality of the MCAS result reports and CDs provided to districts.

- Support opportunities for districts and schools to share and troubleshoot their approaches to using MCAS results, through in-person and on-line forums that are non-threatening and non-monitoring in nature.

- Review district and school utilization of MCAS results and actively disseminate identified positive practices.

- Continue efforts to develop other measures of student achievement to be used within education reform efforts.

*To District and School Educators*

- Keep the beat going—not fear of MCAS or needless threat or competition—but the importance and usefulness of using MCAS results openly and responsibly. Encourage educators on all levels to continue probing curricula and classroom practice, moving to higher levels of reflection and change.

- Set and communicate clear expectations and responsibilities for all within schools and districts for using MCAS results and other measures of student achievement to improve student learning.

- Distribute the appropriate MCAS results to teachers so that they can maximize the use of these to support and prepare their students. In order for teachers to make appropriate changes in curriculum taught and in instructional and assessment strategies used, it is imperative that they receive the results of the students they taught previously as well as those of their current students.

- Support and encourage expansion of collaborative efforts in using MCAS results, especially drawing together grade level, subject area, and cross grade groupings of educators.

- Continue to develop staff leaders in all schools who have confidence and expertise in using data for making decisions about curriculum, instruction, assessment, and allocation of resources. Support their efforts to bring other staff members into this work.

- Reward and recognize the accomplishments of collaborative efforts. Celebrate improvements in student achievement that are manifested by MCAS results as well as other measures.

- Encourage development, use, and sharing of wider varieties of instructional and assessment strategies that show promise in better preparing students to meet the rigorous requirements of MCAS as well as those of future academic or work-related activities.

- Encourage the development and use of other measures of student achievement that complement the MCAS data.

- Document intentional change efforts and the shifts in student achievement that may be linked to those efforts.

# APPENDIX A : Blank Questionnaires for Superintendents, Curriculum Directors, Principals, and Teachers

# Complete List of Districts from Whom Questionnaires Were Received

# SUPERINTENDENT QUESTIONNAIRE

*Please note that this study is specifically focused on the use of MCAS results in schools and districts, rather than on related activities or concerns such as general preparation for testing or alignment with curriculum frameworks. Thank you for taking the time to complete this important survey.*

1. Please indicate (with a check mark) which of the following individuals or groups have been responsible for analysis of MCAS data in your district during the current school year.

❑Superintendent ❑Assistant Superintendent
❑Curriculum Director(s) ❑Outside Consultant
❑Principals ❑District-wide Teams
❑School Teams ❑Grade Level Teams
❑Subject Area Teams ❑Other(s) *(Please specify.)* _____

2. What computer software packages or other data analysis tools (if any) are being used in your district?
Software packages: _____
Other data analysis tools: _____

3. Have the MCAS results from the 1998-1999 testing been disseminated to all schools in your district?
❑YES ❑NO

If YES, by when? (Month: _____, Year:_____)
If YES, please continue with question #4.

If NO, please explain._____
If NO, please move to Question #7.

4. To whom were the MCAS results disseminated in the schools in your district?
❑Principals
❑All faculty/staff
❑Selected faculty/staff (please specify) _____

5. Please indicate the level(s) of analysis of the MCAS results that were provided to schools from your district office.
❑District results
Please indicate the types of breakdowns provided in district results:
❑By grade level
❑By curriculum area
❑By subscores within curriculum areas
❑By race, ethnicity
❑By gender
❑By school
❑Others (Please specify)_____

❑School results
Please indicate the types of breakdowns provided in individual school results:
❑By grade level
❑By curriculum area
❑By subscores within curriculum areas
❑By test item
❑By race, ethnicity
❑By gender

❑By feeder school
❑Others (Please specify)_____

Please indicate the students for which MCAS results were sent to schools:
❑Results of students who were in the school when tested
❑Results of students who are in that school now, but were in a feeder school when tested
❑Other *(Please specify.)* _____

Please indicate the level(s) of analysis of the MCAS results that were provided to individual teachers in your district's schools:
❑Results of students they taught during the year of testing
❑Results of students they currently teach
❑Item analysis by district
❑Item analysis by school
❑Item analysis by class group
❑Item analysis by student
❑Other *(Please specify.)* _____

6. What was the **primary method for dissemination** of MCAS results to the schools?

7. What was the **greatest challenge** facing the district office in providing MCAS results in a useful form to schools?

8. Have you communicated with **school administrators** in your district about district expectations for school use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
❑ YES ❑ NO
If YES, please describe these expectations: _____

_____

9. Does your district provide any specific incentives for **school administrators** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
❑ YES ❑ NO
If YES, please describe these incentives:_____

_____

10. What professional development methods have you used in your district to provide **school administrators** with the knowledge and skills they need to analyze and use MCAS results effectively?
❑ District-wide workshops for administrators (Topics/focus:_____)
❑ Cross-school administrator working groups (Topics/focus:_____)
❑ None
❑ Other (Please specify.) _____

11. What methods have you used in your district to engage **school administrators** in learning from their own schools' MCAS results and using them effectively?
    - ❑ District-wide workshops for administrators
    - ❑ Cross-school administrator working groups
    - ❑ None
    - ❑ Other (Please specify.) _____

12. What (if any) outside resources, e.g., organizations or consultants, has your district used to help your **school administrators** analyze and use their MCAS results effectively?

13. Have you communicated with **faculty and staff** about district expectations for the school use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
    ❑ YES ❑ NO
    If YES, please describe these expectations: _____

    _____

14. Does your district provide any specific incentives for **faculty and staff** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
    ❑ YES ❑ NO
    If YES, please describe these incentives:_____

15. What professional development methods have you used in your district to provide **school faculty and staff** with the knowledge and skills they need to analyze and use MCAS results effectively?
    - ❑ District-wide workshops for teachers (Topics/focus:_____)
    - ❑ School-based workshops for teachers (Topics/focus:_____)
    - ❑ Other (Please specify.) _____

16. What methods have you used in your district to engage **school faculty and staff** in learning from their own schools' MCAS results and using them effectively?
    - ❑ District-wide workshops for teachers
    - ❑ Cross-district grade level working groups
    - ❑ School-based grade level or subject area working groups
    - ❑ Vertical (across grades) working groups in subject areas
    - ❑ School-based, cross-grade, and/or cross-subject working groups
    - ❑ Other (Please specify.) _____

17. Please circle the strategy/activity in the checklist in #15 above that you have found to be most effective.
    Briefly explain why you believe this strategy/activity to be effective:_____

    _____

18. What (if any) outside resources, e.g., organizations or consultants, has your district used to help your **school faculty and staff** analyze and use their MCAS results effectively?

19. To what extent do you believe that working with MCAS results is serving as a positive stimulus for educators in your district to work together toward common purposes based on identified student needs?*(Circle the number of your response.)*

| **To a Great Extent** | | | | **Not at All** |
|---|---|---|---|---|
| **(5)** | **(4)** | **(3)** | **(2)** | **(1)** |

Comments: _____

20. In thinking about your own district's MCAS results, please share with us what you believe to be the three most important student achievement gaps or concerns identified?

1. _____
2. _____
3. _____

*Given these areas of need for improvement in student achievement, please respond to the following questions about actions taken in the areas of curriculum, instruction, assessment, and resource allocation.*

21. Have ***curriculum changes*** been made or identified to address any of these student achievement gaps or concerns? ❑YES ❑NO
If YES, please share **ONE example** of what you believe to be a significant **curriculum** change:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change, e.g., cross-level team of 8 English Language Arts teachers and the curriculum director?_____

_____

What results of this change, if any, have been observed?_____

22. In these or other curricular changes planned by your district, please indicate any courses or particular areas of your district's curricula that have been eliminated or added.

Courses **eliminated**:_____

Courses **added**: _____

Curricular areas of study **eliminated**: _____

Curricular areas of study **added**: _____

23. Have ***instructional changes*** been made or identified to address any of these student achievement gaps or concerns? ❑YES ❑NO
If YES, please share **ONE example** of what you believe to be a significant **instructional** change:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

_____

What results of this change, if any, have been observed?_____

24. Have ***changes in classroom assessment*** been made or identified to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **change in classroom assessment**:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

What results of this change, if any, have been observed?_____

25. Has the ***allocation of resources*** in your district changed due to efforts to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **change in allocation of resources**:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

_____

What results of this change, if any, have been observed?_____

26. Please share with us in a few words **your greatest challenge** in promoting positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students.

27. What do you believe is the **most important action you have taken as a leader in your district** to promote positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students?

## BACKGROUND

*Please note that this information will be used for research purposes only and will be kept strictly confidential. No individuals or districts will be identified or recognizable in the final report.*

Name of district: _____

Number of students: _____

Percent of students classified as free or reduced lunch: _____

## FOLLOW-UP

❑ Please indicate here if there is a particular strategy or practice in terms of using MCAS data that is being used in your district that you think is particularly valuable and about which you or someone else in your district would be willing to be interviewed by telephone for this study.

Strategy or practice: _____

Name of person to be called: _____
Position: _____
Telephone number: _____
E-Mail: _____

❑ Please indicate here if you or someone else in your district would like to provide additional input to this research study through a telephone interview

Name: _____
Position: _____
Telephone number: _____
E-Mail: _____

***THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!***

***Please return this questionnaire in the stamped, self-addressed envelope provided to:***

**Learning Innovations—*A Division of WestEd***
**91 Montvale Avenue**
**Stoneham, MA 02180**

# CURRICULUM DIRECTOR QUESTIONNAIRE

*Please note that this study is specifically focused on the use of MCAS results in schools and districts, rather than on related activities or concerns such as general preparation for testing or alignment with curriculum frameworks. Thank you for taking the time to complete this important survey.*

1. Please indicate (with a check mark) which of the following individuals or groups have been responsible for analysis of MCAS data in your district during the current school year.

   ❑Superintendent ❑Assistant Superintendent
   ❑Curriculum Director(s) ❑Outside Consultant
   ❑Principals ❑District-wide Teams
   ❑School Teams ❑Grade Level Teams
   ❑Subject Area Teams ❑Other(s) *(Please specify.)* _____

2. Have you personally been involved in analyzing MCAS results? ❑YES ❑NO

3. What computer software packages or other data analysis tools (if any) are being used in your district?
   Software packages: _____
   Other data analysis tools: _____

4. Have teachers in your curriculum area received MCAS results?
   ❑YES ❑NO

   If YES, by when? (Month: _____, Year:_____)
   If YES, please continue with question #5.
   If NO, please explain._____
   If NO, please move to Question #7.

5. Please indicate the level(s) of analysis of the MCAS results that were provided to teachers in your curriculum area.

   ❑District results

   Please indicate the types of breakdowns provided in district results:

   ❑By grade level
   ❑By curriculum area
   ❑By subscores within curriculum areas
   ❑By race, ethnicity
   ❑By gender
   ❑By school
   ❑Others (Please specify)_____

   ❑School results

   Please indicate the types of breakdowns provided in individual school results:

   ❑By grade level
   ❑By curriculum area
   ❑By subscores within curriculum areas
   ❑By test item
   ❑By race, ethnicity
   ❑By gender
   ❑By feeder school
   ❑Others (Please specify)_____ _____

Please indicate the students for which MCAS results were sent to schools:

- ❑Results of students who were in the school when tested
- ❑Results of students who are in that school now, but were in a feeder school when tested
- ❑Other *(Please specify.)* _____

Please indicate the level(s) of analysis of the MCAS results that were provided to individual teachers in your curriculum area:

- ❑Results of students they taught during the year of testing
- ❑Results of students they currently teach
- ❑Item analysis by district
- ❑Item analysis by school
- ❑Item analysis by class group
- ❑Item analysis by student
- ❑Other *(Please specify.)* _____

6. What was the **primary method for dissemination** of MCAS results to the teachers in your curriculum area?

7. Has your superintendent communicated with **curriculum directors** about district expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____
   _____

8. Does your district provide any specific incentives for **curriculum directors** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these incentives: _____
   _____

9. Have you communicated with **teachers in your curriculum area** about district expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____
   _____

10. Does your district provide any specific incentives for **teachers** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
    ❑ YES ❑ NO
    If YES, please describe these incentives: _____
    _____

11. What professional development methods have been used in your district to provide **teachers in your curriculum area** with the knowledge and skills they need to analyze and use MCAS results effectively?
    - ❑ District-wide workshops for teachers (Topics/focus:_____)
    - ❑ School-based workshops for teachers (Topics/focus:_____)
    - ❑ Other (Please specify.) _____

12. What methods have been used in your district to engage **teachers in your curriculum area** in learning from their own schools' MCAS results and using them effectively?
    - ❑ District-wide workshops for teachers
    - ❑ Cross-district grade level working groups
    - ❑ School-based grade level or subject area working groups
    - ❑ Vertical (across grades) working groups in subject areas
    - ❑ School-based, cross-grade, and/or cross-subject working groups
    - ❑ Other (Please specify.) _____

13. Please circle the strategy/activity in the checklist in #12 above that you have found to be most effective.
    Briefly explain why you believe this strategy/activity to be effective:_____

    _____

14. What (if any) outside resources, e.g., organizations or consultants, has your district used to help **teachers in your curriculum area** to analyze and use their MCAS results effectively?

15. To what extent do you believe that working with MCAS results is serving as a positive stimulus for **teachers in your curriculum area** to work together toward common purposes based on identified student needs?*(Circle the number of your response.)*

| **To a Great Extent** | | | | **Not at All** |
|---|---|---|---|---|
| **(5)** | **(4)** | **(3)** | **(2)** | **(1)** |

    Comments: _____

16. In thinking about the MCAS results in your curriculum area, please share with us what you believe to be the three most important student achievement gaps or concerns identified?

    4. _____

    5. _____

    6. _____

*Given these areas of need for improvement in student achievement, please respond to the following questions about actions taken within your curriculum area in the realms of curriculum, instruction, assessment, and resource allocation.*

17. Have ***curriculum changes*** been made or identified in your curriculum area to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **curriculum** change:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change (e.g., cross-level team of 8 English Language Arts teachers and the curriculum director)?_____

_____

What results of this change, if any, have been observed?_____

18. In these or other curricular changes planned by your district, please indicate any courses or particular areas of study within your curriculum focus that have been eliminated or added.

Courses **eliminated**:_____

Courses **added**: _____

Curricular areas of study **eliminated**: _____

Curricular areas of study **added**: _____

19. Have ***instructional changes*** been made or identified in your curriculum area to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **instructional** change:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

_____

What results of this change, if any, have been observed?_____

20. Have ***changes in classroom assessment*** been made or identified in your curriculum area to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **change in classroom assessment**:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

What results of this change, if any, have been observed?_____

21. Has the ***allocation of resources*** in your curriculum area changed due to efforts to address any of these student achievement gaps or concerns? ❑YES ❑NO

    If YES, please share **ONE example** of what you believe to be a significant **change in allocation of resources**:

    _____

    What specific **MCAS results** prompted the change?_____

    Who was involved in the decision-making about this change? _____

    _____

    What results of this change, if any, have been observed?_____

22. Please share with us in a few words **your own greatest challenge as a curriculum director** in promoting positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students.

23. What do you believe is the **most important action you have taken as a leader in your district** to promote positive, responsible use of MCAS data for purposes of improving schools and increasing achievement for all students?

**BACKGROUND**

*Please note that this information will be used for research purposes only and will be kept strictly confidential. No individuals or districts will be identified or recognizable in the final report.*

Name of district: _____

Curricular area for which you are responsible: _____

Your title: _____

**FOLLOW-UP**

❑ Please indicate here if there is a particular strategy or practice in terms of using MCAS data that is being used in your district that you think is particularly valuable and about which you or someone else in your district would be willing to be interviewed by telephone for this study.

Strategy or practice: _____

Name of person to be called: _____

Position: _____
Telephone number: _____
E-Mail: _____

☐ Please indicate here if you or someone else in your district would like to provide additional input to this research study through a telephone interview

Name: _____
Position: _____
Telephone number: _____
E-Mail: _____

## *THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!*

***Please return this questionnaire in the stamped, self-addressed envelope provided to:***

**Learning Innovations—*A Division of WestEd***
**91 Montvale Avenue**
**Stoneham, MA 02180**

# PRINCIPAL QUESTIONNAIRE

*Please note that this study is specifically focused on the use of MCAS results in schools and districts, rather than on related activities or concerns such as general preparation for testing or alignment with curriculum frameworks. Thank you for taking the time to complete this important survey.*

1. Has your school received MCAS results from the district?
   ❑YES ❑NO

   If YES, by when? (Month: _____, Year:_____)
   If YES, please continue with question #2.
   If NO, please explain._____
   If NO, please move to Question #7.

2. Please indicate the level(s) of analysis of the MCAS results that were provided to your school from your district office.
   ❑District results
      Please indicate the types of breakdowns provided in district results:
         ❑By grade level
         ❑By curriculum area
         ❑By subscores within curriculum areas
         ❑By race, ethnicity
         ❑By gender
         ❑By school
         ❑Others (Please specify)_____
   ❑School results
      Please indicate the types of breakdowns provided in your individual school results:
         ❑By grade level
         ❑By curriculum area
         ❑By subscores within curriculum areas
         ❑By test item
         ❑By race, ethnicity
         ❑By gender
         ❑By feeder school
         ❑Others (Please specify)_____

      Please indicate the students for which MCAS results were sent to your school:
         ❑Results of students who were in the school when tested
         ❑Results of students who are in your school now, but were in a feeder school when tested
         ❑Other *(Please specify.)* _____
      Please indicate the level(s) of analysis of the MCAS results that were provided to individual teachers in your school:
         ❑Results of students they taught during the year of testing
         ❑Results of students they currently teach
         ❑Item analysis by district
         ❑Item analysis by school
         ❑Item analysis by class group
         ❑Item analysis by student
         ❑Other *(Please specify.)* _____

3. Please indicate (with a check mark) which of the following individuals or groups have been responsible for analysis of MCAS data in your school during the current school year.
   - ❑ Principal
   - ❑ Assistant Principal
   - ❑ School Team (cross grade, cross subject)
   - ❑ Grade Level Teams
   - ❑ Subject Area Teams
   - ❑ Other(s) *(Please specify.)* _____

4. Have you personally been involved in analyzing MCAS results? ❑ YES ❑ NO

5. What computer software packages or other data analysis tools (if any) are being used in your school?
   Software packages: _____
   Other data analysis tools: _____

6. What was the **primary method for dissemination** of MCAS results to the teachers in your school?

7. Has your superintendent communicated with **principals** about district expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____

   _____

8. Does your district provide any specific incentives for **principals** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these incentives: _____

   _____

9. Have you communicated with **teachers in your school** about district expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____

   _____

10. Does your district provide any specific incentives for **teachers** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
    ❑ YES ❑ NO
    If YES, please describe these incentives: _____

    _____

11. What professional development methods have been used to provide **teachers in your school** with the knowledge and skills they need to analyze and use MCAS results effectively?
    - ❑ District-wide workshops for teachers (Topics/focus:_____)
    - ❑ School-based workshops for teachers (Topics/focus:_____)
    - ❑ Other (Please specify.) _____

12. What methods have been used to engage **teachers in your school** in learning from their own school's MCAS results and using them effectively?
    - ❑ District-wide workshops for teachers
    - ❑ Cross-district grade level working groups
    - ❑ School-based grade level or subject area working groups
    - ❑ Vertical (across grades) working groups in subject areas
    - ❑ School-based, cross-grade, and/or cross-subject working groups
    - ❑ Other (Please specify.) _____

13. Please circle the strategy/activity in the checklist in #12 above that you have found to be most effective.
    Briefly explain why you believe this strategy/activity to be effective:_____

    _____

14. What (if any) outside resources, e.g., organizations or consultants, has your school or district used to help **teachers** to analyze and use their MCAS results effectively?

15. To what extent do you believe that working with MCAS results is serving as a positive stimulus for **teachers in your school** to work together toward common purposes based on identified student needs?*(Circle the number of your response.)*

| **To a Great Extent** | | | | **Not at All** |
|---|---|---|---|---|
| **(5)** | **(4)** | **(3)** | **(2)** | **(1)** |

    Comments: _____

16. In thinking about the MCAS results in your school, please share with us what you believe to be the three most important student achievement gaps or concerns identified?

    1. _____
    2. _____
    3. _____

*Given these areas of need for improvement in student achievement, please respond to the following questions about actions taken within your school in the realms of curriculum, instruction, assessment, and resource allocation.*

17. Have ***curriculum changes*** been made or identified in your school to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **curriculum** change:

_____

What specific **MCAS results** prompted the change?_____
Who was involved in the decision-making about this change (e.g., cross-grade team of English Language Arts teachers and the curriculum director)?_____

_____

What results of this change, if any, have been observed?_____

18. In these or other curricular changes planned by your school, please indicate any courses or particular areas of study within your school that have been eliminated or added.

Courses **eliminated**:_____

Courses **added**: _____

Curricular areas of study **eliminated**: _____

Curricular areas of study **added**: _____

19. Have ***instructional changes*** been made or identified in your school to address any of these student achievement gaps or concerns? ❑YES ❑NO
If YES, please share **ONE example** of what you believe to be a significant **instructional** change:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

_____

What results of this change, if any, have been observed?_____

20. Have ***changes in classroom assessment*** been made or identified in your school to address any of these student achievement gaps or concerns?❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **change in classroom assessment**:

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

What results of this change, if any, have been observed?_____

21. Has the ***allocation of resources*** in your school changed due to efforts to address any of these student achievement gaps or concerns? ❑YES ❑NO

    If YES, please share **ONE example** of what you believe to be a significant **change in allocation of resources**:

    _____

    What specific **MCAS results** prompted the change?_____

    Who was involved in the decision-making about this change? _____

    _____

    What results of this change, if any, have been observed?_____

22. Please share with us in a few words **your own greatest challenge as a school administrator** in promoting positive, responsible use of MCAS data for purposes of improving your school and increasing achievement for all students.

23. What do you believe is the **most important action you have taken as a leader in your school** to promote positive, responsible use of MCAS data for purposes of improving your school and increasing achievement for all students?

## BACKGROUND

*Please note that this information will be used for research purposes only and will be kept strictly confidential. No individuals or districts will be identified or recognizable in the final report.*

Name of district: _____

Name of your school: _____

Level of your school: ❑Elementary ❑Middle ❑High

What grades does your school include? _____ Number of students in your school: _____

Your title: _____

## FOLLOW-UP

❑ Please indicate here if there is a particular strategy or practice in terms of using MCAS data that is being used in your school or district that you think is particularly valuable and about which you or someone else in your district would be willing to be interviewed by telephone for this study.

Strategy or practice: _____

Name of person to be called: _____

Position: _____
Telephone number: _____
E-Mail: _____

❑ Please indicate here if you or someone else in your school or district would like to provide additional input to this research study through a telephone interview

Name: _____
Position: _____
Telephone number: _____
E-Mail: _____

***THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!***

***Please return this questionnaire in the stamped, self-addressed envelope provided to:***

**Learning Innovations—*A Division of WestEd***
**91 Montvale Avenue**
**Stoneham, MA 02180**

# TEACHER QUESTIONNAIRE

*Please note that this study is specifically focused on the use of MCAS results in schools and districts, rather than on related activities or concerns such as general preparation for testing or alignment with curriculum frameworks. Thank you for taking the time to complete this important survey.*

1. Have you, as a teacher, received MCAS results from your district office or your principal?
   ❑YES ❑NO
   If YES, by when? (Month: _____, Year:_____)
   If YES, please continue with question #2.
   If NO, please explain._____
   If NO, please move to Question #7.

2. What was the **primary method for dissemination** of MCAS results to the teachers in your school?

3. Please indicate the level(s) of analysis of the MCAS results that were provided to teachers in your school.
   ❑District results
   Please indicate the types of breakdowns provided in district results:
   ❑By grade level
   ❑By curriculum area
   ❑By subscores within curriculum areas
   ❑By race, ethnicity
   ❑By gender
   ❑By school
   ❑Others (Please specify)_____
   ❑School results
   Please indicate the types of breakdowns provided in your individual school results:
   ❑By grade level
   ❑By curriculum area
   ❑By subscores within curriculum areas
   ❑By test item
   ❑By race, ethnicity
   ❑By gender
   ❑By feeder school
   ❑Others (Please specify)_____
   Please indicate the students for which MCAS results were given to teachers in your school:
   ❑Results of students who were in the school when tested
   ❑Results of students who are in your school now, but were in a feeder school when tested
   ❑Other *(Please specify.)* _____

   Please indicate the level(s) of analysis of the MCAS results that were provided to individual teachers in your school:
   ❑Results of students they taught during the year of testing
   ❑Results of students they currently teach
   ❑Item analysis by district
   ❑Item analysis by school
   ❑Item analysis by class group
   ❑Item analysis by student

❑Other *(Please specify.)* _____

4. Have you personally been involved in analyzing MCAS results? ❑YES ❑NO

5. Please indicate (with a check mark) which of the following individuals or groups have been responsible for analysis of MCAS data in your school during the current school year.
   ❑Principal
   ❑Assistant Principal
   ❑School Team (cross grade, cross subject)
   ❑Grade Level Teams
   ❑Subject Area Teams
   ❑Other(s) *(Please specify.)* _____

6. What computer software packages or other data analysis tools (if any) are being used in your school?
   Software packages: _____
   Other data analysis tools: _____

7. Has your **superintendent** communicated with **teachers** about district expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____

   _____

8. Has your **principal** communicated with **teachers in your school** about expectations for use of MCAS results to make changes in curriculum, instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these expectations: _____

   _____

9. Does your **district** provide any specific incentives for **teachers** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
   ❑ YES ❑ NO
   If YES, please describe these incentives: _____

   _____

10. Does your **school** provide any specific incentives for **teachers** to encourage the use of MCAS results to make changes in instruction, assessment, and/or resource allocation?
    ❑ YES ❑ NO
    If YES, please describe these incentives: _____

    _____

11. What professional development methods have been offered for **teachers in your school** to provide them with the knowledge and skills they need to analyze and use MCAS results effectively?
    ❑ District-wide workshops for teachers (Topics/focus: _____)
    ❑ School-based workshops for teachers (Topics/focus: _____)
    ❑ Other (Please specify.) _____

12. What methods have been used to engage **teachers in your school** in learning from your own school's MCAS results and using them effectively?
    - ❑ District-wide workshops for teachers
    - ❑ Cross-district grade level working groups
    - ❑ School-based grade level or subject area working groups
    - ❑ Vertical (across grades) working groups in subject areas
    - ❑ School-based, cross-grade, and/or cross-subject working groups
    - ❑ Other (Please specify.) _____

13. Please circle the strategy/activity in the checklist in #12 above that you have found to be most effective.
    Briefly explain why you believe this strategy/activity to be effective:_____

    _____

14. To what extent do you believe that working with MCAS results is serving as a positive stimulus for **teachers in your school** to work together toward common purposes based on identified student needs?*(Circle the number of your response.)*

| **To a Great Extent** | | | | **Not at All** |
|---|---|---|---|---|
| **(5)** | **(4)** | **(3)** | **(2)** | **(1)** |

    Comments: _____

15. If you have worked with MCAS results, to what extent has this work had an effect on the choice of instructional strategies that you use in your own classroom? *If you have not engaged in work with MCAS results, please write NONE here.* _____

| **To a Great Extent** | | | | **Not at All** |
|---|---|---|---|---|
| **(5)** | **(4)** | **(3)** | **(2)** | **(1)** |

16. In thinking about your own school's MCAS results, please share with us, ***relative to your own teaching responsibilities***, what you believe to be the three most important student achievement gaps or concerns identified? *If you have not reviewed results, please write NONE here.* _____

    7. _____

    8. _____

    9. _____

*Given these areas of need for improvement in student achievement, please respond to the following questions about actions you personally have taken or actions that have been taken by groups of teachers within your school or district in the areas of curriculum, instruction, and assessment.*

17. Have ***curriculum changes*** been made or identified in your school to address any of these student achievement gaps or concerns? ❑YES ❑NO
    If YES, please share **ONE example** of what you believe to be a significant **curriculum** change:

    _____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change (e.g., cross-grade team of English Language Arts teachers and the curriculum director)?_____

_____

What results of this change, if any, have been observed?_____

18. In these or other curricular changes planned by your school, please indicate any courses or particular areas of study within your school that have been eliminated or added.

    Courses **eliminated**:_____

    Courses **added**: _____

    Curricular areas of study **eliminated**: _____

    Curricular areas of study **added**: _____

19. Have ***instructional changes*** been made or identified in your school to address any of these student achievement gaps or concerns? ❑YES ❑NO

    If YES, please share **ONE example** of what you believe to be a significant **instructional** change:

    _____

    What specific **MCAS results** prompted the change?_____

    Who was involved in the decision-making about this change? _____

    _____

    What results of this change, if any, have been observed?_____

20. Have ***changes in classroom assessment*** been made or identified in your school to address any of these student achievement gaps or concerns?❑YES ❑NO

    If YES, please share **ONE example** of what you believe to be a significant **change in classroom assessment**:

    _____

    What specific **MCAS results** prompted the change?_____

    Who was involved in the decision-making about this change? _____

    What results of this change, if any, have been observed?_____

21. Has the ***allocation of resources*** in your school changed due to efforts to address any of these student achievement gaps or concerns? ❑YES ❑NO

If YES, please share **ONE example** of what you believe to be a significant **change in allocation of resources:**

_____

What specific **MCAS results** prompted the change?_____

Who was involved in the decision-making about this change? _____

_____

What results of this change, if any, have been observed?_____

22. Please share with us in a few words **your own greatest challenge as a teacher** in making positive, responsible use of MCAS data for purposes of improving your school and increasing achievement for your students.

23. What do you believe is the **most important action you have taken as a leader in your school** to promote positive, responsible use of MCAS data for purposes of improving your school and increasing achievement for all students?

**BACKGROUND**

*Please note that this information will be used for research purposes only and will be kept strictly confidential. No individuals or districts will be identified or recognizable in the final report.*

Name of district: _____

Name of your school: _____

Level of your school: ❑Elementary ❑Middle ❑High

Grade(s) that you teach: _____

Subject(s) that you teach (for middle school and high school teachers or elementary specialists):

_____

**FOLLOW-UP**

❑ Please indicate here if there is a particular strategy or practice in terms of using MCAS data that is being used in your school or district that you think is particularly valuable and about which you or someone else in your district would be willing to be interviewed by telephone for this study.

Strategy or practice: _____

Name of person to be called: _____
Position: _____ _____
Telephone number: _____
E-Mail: _____

☐ Please indicate here if you or someone else in your school or district would like to provide additional input to this research study through a telephone interview

Name: _____
Position: _____
Telephone number: _____
E-Mail: _____

***THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!***

***Please return this questionnaire in the stamped, self-addressed envelope provided to:***

**Learning Innovations—*A Division of WestEd***
**91 Montvale Avenue**
**Stoneham, MA 02180**

## DISTRICTS PARTICIPATING IN QUESTIONNAIRE SURVEY

ABINGTON
ACHUSHNET
ADAMS-CHESHIRE
AMESBURY
AMHERST-PELHAM
ASHBURNHAM-WESTMINSTER REGIONAL
ATHOL-ROYALSTON
AYER

BARNSTABLE
BELMONT
BERKSHIRE HILLS REGIONAL
BERLIN-BOYLSTON
BEVERLY
BLACKSTONE-MILLVILE
BOSTON
BOURNE
BOXBOROUGH
BRAINTREE
BRIDGEWATER
BRIMFIELD, BROCKFIELD, TOLLAND, STURBRIDGE, WALES
BROCKTON
BROOKLINE
BURLINGTON

CAMBRIDGE
CANTON
CARLISLE
CARVER
CHELSEA
CHICOPEE
CLINTON
CONCORD/CARLISLE

DANVERS
DARTMOUTH
DENNIS/YARMOUTH
DIGHTON-REHOBOTH
DOUGLAS
DOVER/SHERBORN
DRACUT
DUXBURY

EAST HAMPTON
EASTON
EVERETT

FALL RIVER
FALMOUTH
FITCHBURG
FOXBOROUGH
FRAMINGHAM
FRANKLIN

GARDNER
GLOUCESTER
GRAFTON
GRANBY
GREENFIELD
GROTON/DUNSTABLE

HALIFAX
HAMILTON-WENHAM
HAMPDEN-WILBRAHAM
HAMPSHIRE
-CHESTERFIELD
-WESTHAMPTON
-WILLIAMSBURG
-SOUTHAMPTON
HANOVER
HATFIELD
HINGHAM
HOLBROOK
HOLLISTON
HOPEDALE PUBLIC SCHOOLS
HOPKINTON
HUDSON
HULL

IPSWICH

LAWRENCE
LEICESTER
LENOX
LEOMINSTER
LEXINGTON
LINCOLN-SUDBURY
LITTLETON
LONGMEADOW
LUDLOW
LYNN
LYNNFIELD

MANCHESTER
MARBLEHEAD
MARION
MARSHFIELD
MARTHA'S VINEYARD
MASCONOMET
MATTAPOISETT
MEDFORD
MENDON-UPTON
METHUEN
MIDDLEBORO
MILLIS
MWRSD

NATICK
NAUSET
NEEDHAM
NORTH ADAMS
NORTHBRIDGE
NORTHHAMPTON
NORTH BERKSHIRE
NORTH MIDDLESEX
NORTH READING
NORWELL
NORWOOD

OLD ROCHESTER

PALMER
PEABODY
PITTSFIELD
PROVINCETOWN

RANDOLPH
READING
REVERE
ROWE

SALEM
SANDWICH
SAUGUS
SEEKONK
SHIRLEY
SILVER LAKE
SOMERVILLE
SOUTHBRIDGE
SOUTHERN BERKSHIRE
SOUTH HADLEY
SOUTHWICK-TOLLAND
SPRINGFIELD
STONEHAM
STOUGHTON
SWANSEA
SWAMPSCOTT

TEWKSBURY
TOPSFIELD-BOXFORD
TYNGSBOROUGH

WACHUSETT
WAKEFIELD
WALES
WALPOLE
WALTHAM
WARE
WATERTOWN
WEBSTER
WESTBOROUGH
WEST BOYLSTON
WEST BRIDGEWATER

WESTFIELD
WESTFORD
WESTHAMPTON
WESTON
WEST SPRINGFIELD
WEYMOUTH
WHITMAN – HANSON
WILLIAMSBURG PUBLIC SCHOOLS
WILMINGTON
WINCHESTER
WINCHENDON
WORCESTER
WRENTHAM

# APPENDIX B : List of Districts That Participated in Focus Groups

**Andover**
**Athol**
**Attleboro**
**Brookline**
**Burlington**
**Danvers**
**Easthampton**
**East Bridgewater**
**Gardner**
**Hamilton-Wenham**
**Holyoke**
**Lawrence**
**Longmeadow**
**Lowell**
**Melrose**
**Milbury**
**Monson**
**Nauset**
**North Andover**
**Pentucket**
**Plymouth**
**Randolph**
**Rockland**
**Salem**
**Scituate**
**Southwick-Tolland**
**Springfield**
**Stoughton**
**Sudbury**
**Triton**
**Wakefield**
**Ware**
**Westboro**
**West Bridgewater**
**Winthrop**
**Whitman-Hanson**